



# Technical Report

prepared for:

## **Environmental Restoration**

110 Granby Street

Bloomfield CT, 06002

**Attention: Blake MacKinney**

Report Date: 08/20/2014

**Client Project ID: CD2-84**

York Project (SDG) No.: 14H0603

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 08/20/2014  
Client Project ID: CD2-84  
York Project (SDG) No.: 14H0603

**Environmental Restoration**

110 Granby Street  
Bloomfield CT, 06002  
Attention: Blake MacKinney

---

**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on August 13, 2014 and listed below. The project was identified as your project: **CD2-84**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the attachment to this report, and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
14H0603-01	Jackson 1	Water	08/11/2014	08/13/2014
14H0603-02	Jackson 2	Soil	08/11/2014	08/13/2014
14H0603-03	Delmour 3	Water	08/11/2014	08/13/2014

**General Notes for York Project (SDG) No.: 14H0603**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 08/20/2014





## Sample Information

**Client Sample ID:** Jackson 1

**York Sample ID:** 14H0603-01

**York Project (SDG) No.**

14H0603

**Client Project ID**

CD2-84

**Matrix**

Water

**Collection Date/Time**

August 11, 2014 10:20 am

**Date Received**

08/13/2014

### Polychlorinated Biphenyls (PCB)

#### Log-in Notes:

#### Sample Notes: EXT-EM

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:03	AMC
11104-28-2	Aroclor 1221	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:03	AMC
11141-16-5	Aroclor 1232	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:03	AMC
53469-21-9	Aroclor 1242	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:03	AMC
12672-29-6	Aroclor 1248	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:03	AMC
11097-69-1	Aroclor 1254	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:03	AMC
11096-82-5	Aroclor 1260	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:03	AMC
1336-36-3	* Total PCBs	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:03	AMC
Surrogate Recoveries		Result		Acceptance Range							
877-09-8	Surrogate: Tetrachloro-m-xylene	4.50 %		S-04		30-120					
2051-24-3	Surrogate: Decachlorobiphenyl	%		S-04		30-120					

## Sample Information

**Client Sample ID:** Jackson 2

**York Sample ID:** 14H0603-02

**York Project (SDG) No.**

14H0603

**Client Project ID**

CD2-84

**Matrix**

Soil

**Collection Date/Time**

August 11, 2014 10:25 am

**Date Received**

08/13/2014

### Polychlorinated Biphenyls (PCB)

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		mg/kg dry	0.175	0.175	10	EPA 8082A	08/18/2014 19:00	08/19/2014 18:58	AMC
11104-28-2	Aroclor 1221	ND		mg/kg dry	0.175	0.175	10	EPA 8082A	08/18/2014 19:00	08/19/2014 18:58	AMC
11141-16-5	Aroclor 1232	ND		mg/kg dry	0.175	0.175	10	EPA 8082A	08/18/2014 19:00	08/19/2014 18:58	AMC
53469-21-9	Aroclor 1242	ND		mg/kg dry	0.175	0.175	10	EPA 8082A	08/18/2014 19:00	08/19/2014 18:58	AMC
12672-29-6	Aroclor 1248	ND		mg/kg dry	0.175	0.175	10	EPA 8082A	08/18/2014 19:00	08/19/2014 18:58	AMC
11097-69-1	Aroclor 1254	2.06		mg/kg dry	0.175	0.175	10	EPA 8082A	08/18/2014 19:00	08/19/2014 18:58	AMC
11096-82-5	Aroclor 1260	2.73		mg/kg dry	0.175	0.175	10	EPA 8082A	08/18/2014 19:00	08/19/2014 18:58	AMC
1336-36-3	* Total PCBs	4.79		mg/kg dry	0.175	0.175	10	EPA 8082A	08/18/2014 19:00	08/19/2014 18:58	AMC
Surrogate Recoveries		Result		Acceptance Range							
877-09-8	Surrogate: Tetrachloro-m-xylene	80.0 %				30-140					
2051-24-3	Surrogate: Decachlorobiphenyl	380 %		GC-Sur r		30-140					

### Total Solids

#### Log-in Notes:

#### Sample Notes:



### Sample Information

**Client Sample ID:** Jackson 2

**York Sample ID:** 14H0603-02

York Project (SDG) No.  
14H0603

Client Project ID  
CD2-84

Matrix  
Soil

Collection Date/Time  
August 11, 2014 10:25 am

Date Received  
08/13/2014

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	95.2		%	0.100	0.100	1	SM 2540G	08/19/2014 11:25	08/19/2014 13:05	KK

### Sample Information

**Client Sample ID:** Delmour 3

**York Sample ID:** 14H0603-03

York Project (SDG) No.  
14H0603

Client Project ID  
CD2-84

Matrix  
Water

Collection Date/Time  
August 11, 2014 10:20 am

Date Received  
08/13/2014

### Polychlorinated Biphenyls (PCB)

### Log-in Notes:

### Sample Notes: EXT-D, EXT-EM

Sample Prepared by Method: EPA SW846-3510C Low Level

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
12674-11-2	Aroclor 1016	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:23	AMC
11104-28-2	Aroclor 1221	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:23	AMC
11141-16-5	Aroclor 1232	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:23	AMC
53469-21-9	Aroclor 1242	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:23	AMC
12672-29-6	Aroclor 1248	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:23	AMC
11097-69-1	<b>Aroclor 1254</b>	<b>1.37</b>		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:23	AMC
11096-82-5	Aroclor 1260	ND		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:23	AMC
1336-36-3	<b>* Total PCBs</b>	<b>1.37</b>		ug/L	0.0556	0.0556	1	EPA 8082A	08/15/2014 05:16	08/18/2014 15:23	AMC
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
877-09-8	Surrogate: Tetrachloro-m-xylene	30.5 %	30-120								
2051-24-3	Surrogate: Decachlorobiphenyl	42.0 %	30-120								





## Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
GC-Surr	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the alternate surrogate.
EXT-EM	The sample exhibited emulsion formation during the extraction process. This may affect surrogate recoveries.
EXT-D	The sample submitted contained sediment. The aqueous portion was decanted off, the volume measured and used for the extraction. The sediment was not included in the extraction.
<hr/>	
*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



# ENVIRONMENTAL RESTORATION LLC

1666 Fabick Drive  
Fenton, MO 63026  
(636) 227-7477  
Fax (636) 227-6447

Alternate billing information:

Report to: Amy Riggett / Blake Mackinney  
Email to: a.riggett@erllc.com / b.mackinney@erllc.com  
City/State Collected: South Plainfield NJ

Analysis/Container/Preservative

Chain of Custody

Page \_\_\_\_\_ of \_\_\_\_\_

Prepared by: 14H0603

Project Description: Cornell Dubilier

Phone: 860-778-9207

Fax:

Collected by: Mackinney

Collected by (signature): Blake Mackinney

Packed on Ice N ☒

Client:

USEPA Region 2

Site/Facility ID #:

Rush

(Lab MUST Be Notified)

Same Day

Next Day

Two Day

Project Name:

CD2-84

P.O. #:

CD2-84

Date Results Needed:

Email? ☐ No ☒ Yes

Fax? ☐ No ☐ Yes

No.

of

Containers

Total Peps

CoCode (lab use only)

Template/Prelogin

Shipped Via:

Remarks/Containment Sample # (lab use only)

2, 1 liter Amber  
1, 802 Clear  
2, 1 liter Amber

\*Matrix SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

Remarks:

pH \_\_\_\_\_ Temp \_\_\_\_\_  
Flow \_\_\_\_\_ Other \_\_\_\_\_

Relinquished by: (Signature) Blake Mackinney	Date: 8-13-14	Time: 0815	Received by: (Signature) [Signature]	8/13/14 8:15
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	

47

Samples returned via:		Condition (lab use only)	
<input type="checkbox"/> Fed Ex	<input type="checkbox"/> Courier	<input type="checkbox"/> UPS	
Temp:	Bottles Received:		
Date:	Time:	pH Checked	NCF: